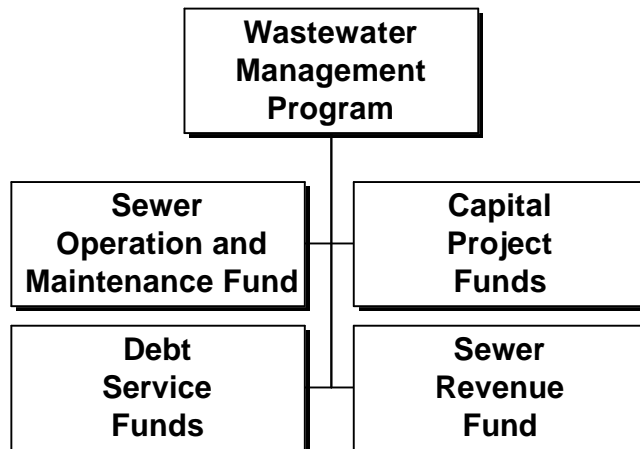


WASTEWATER MANAGEMENT PROGRAM FY 2004 OVERVIEW



WASTEWATER MANAGEMENT PROGRAM

FY 2004 OVERVIEW

The Wastewater Management Program (WMP) is operated, maintained and managed within the Department of Public Works and Environmental Services. The program currently includes the County-owned Noman M. Cole, Jr. Pollution Control Plant (54 million gallons per day (MGD) capacity), approximately 3,135 miles of sewer lines, 61 pump stations, 51 metering stations, and covers approximately 234 square-miles of the County's 407-square-mile land area. Capacity entitlement at the other regional facilities totals 93 MGD. The wastewater maintenance and operations will be performed utilizing a total of 349/348.50 SYE positions in FY 2004. The WMP anticipates a total of 344,385 households in Fairfax County will be connected to public sewer in FY 2004.

In addition to providing County residents and businesses with sewer service, Fairfax County provides sewer service to other nearby jurisdictional entities through "Sales of Service" agreements. The County holds Sales of Service agreements with Arlington County, the cities of Falls Church and Fairfax, the towns of Herndon and Vienna, Fort Belvoir, the Covanta Waste-to-Energy facility and the Fairfax County Water Authority. These entities share the capital and operating costs of the WMP on the basis of actual wastewater flow and reserved treatment capacity.

The strategic planning and overall business monitoring is the responsibility of the Wastewater Administration Division. This includes the Wastewater Management Leadership Team, whose responsibilities focus on long range planning, strategic thinking, continuous improvement processing, wastewater capacity, and financial management.

The Wastewater Collection Division (WCD) is responsible for the County's wastewater collection and conveyance system consisting of sewers, force mains, pumping stations and metering stations. The WCD has a proactive sewer system maintenance program that facilitates a safe and effective wastewater collection system. Each year, over 800 miles of sewer lines are inspected and about 400 miles of sewer lines are cleaned to ensure maximum flow carrying capacity and reduce sewer backups and overflows. Over the last four years, WCD has rehabilitated 94.5 miles of sewer lines to protect the environment and citizens of Fairfax County.

The Wastewater Treatment Division (WTD) is responsible for operating and maintaining the County's wastewater treatment facility, the Noman M. Cole, Jr. Pollution Control Plant (NCPCP). The WTD continues to produce a quality effluent to meet regulatory and permit requirements, despite the major construction program occurring throughout the plant site. The NCPCP has improved performance with no significant increase in costs. In addition, the NCPCP has made significant efforts to become a "good neighbor" by constructing an odor control system to improve the air quality around the plant.

The Wastewater Planning and Monitoring Division (WPMD) is responsible for the agency's fiscal planning, engineering planning and wastewater monitoring. The WPMD continues to effectively monitor the long-term planning needs for the Wastewater Management Program in terms of infrastructure upgrades, maintenance and expansions. The WPMD ensures that all financial requirements are fulfilled by developing a rate structure to adequately recover all operating and maintenance costs, Capital Improvement Program and debt service obligations. The WPMD also plans for system capacity, both in the conveyance system and treatment facilities by initiating expansion and improvement projects to keep pace with increased wastewater flows. The WPMD safeguards the environment by ensuring compliance with water quality standards and prevention of toxic discharges into the collection system.

The system supplements the capacity of its own collections and treatment facilities through "Treatment by Contract" agreements with the District of Columbia Water and Sewer Authority, the Alexandria Sanitation Authority, the Upper Occoquan Sewage Authority, and Arlington County. As stated in the individual agreements, the County pays its share of operating, capital, and/or debt costs of each entity's system based on actual wastewater flows and allocated capacity, respectively.

WASTEWATER MANAGEMENT PROGRAM

FY 2004 OVERVIEW

In FY 2004, the County is projected to provide for the treatment of 111.56 million gallons of wastewater per day. Approximately 44 percent of this flow is treated at the NCPCP. The flow is distributed between the NCPCP and the interjurisdictional facilities as detailed in the table below. The table also includes the capacity utilization percentage and the available (unused) capacity for each plant.

Treatment Plant	FY 2004 Projected Daily Average (MGD)	Capacity Utilization (%)	Available Capacity (MGD)
DCWASA Blue Plains	27.19	87%	3.81
Noman M. Cole, Jr.	48.32	72%	18.68
Alexandria Sanitation Authority	22.10	75%	10.30
Arlington County	2.35	78%	0.65
Upper Occoquan Sewage Authority	11.60	46%	15.44
Total	111.56	71.6%	48.88

To ensure that WMP remains competitive and provides a high performance operation including improvements to the technical and managerial capacities that will continue to enhance service quality, customer service and financial planning, WMP closely monitors the information listed below.

	FY 2002	FY 2003	FY 2004
Sewer Service Charge, \$/1,000 gallons	\$2.88	\$2.95	\$3.03
Treatment Plant Costs, \$/MGD	\$1,068	\$1,078	\$1,089
Sewer System Overflows, Number/1,000 Miles of Sewer	18	15	14
Treatment Plant Discharge Violations per year	0	0	0
Odor Complaints per year	64	0	0

The WMP is comprised of seven separate funds under a self-supporting fund structure (Enterprise Fund) consistent with the Sewer Bond Resolution adopted by the Board of Supervisors in July 1985. For more detailed information of the operational aspects of the various programs, refer to the narrative of Fund 401, Sewer Operation and Maintenance, which immediately follows this Overview. The following is a brief description of the seven active funds:

- ◆ **Fund 400 - Sewer Revenue** is used to credit all operating revenues of the system, as well as most of the interest on invested fund balances. Revenues recorded in this fund are transferred to the various funds to finance their expenditure requirements. The remaining fund balances are used to set aside funds for various reserves and future system requirements.
- ◆ **Fund 401 - Sewer Operation and Maintenance** provides funding for the four divisions responsible for the management and operation of the program, supported by a transfer from Fund 400.
- ◆ **Fund 402 - Sewer Construction Improvements** provides funding for the repair, rehabilitation, and improvement requirements of the entire program's infrastructure.
- ◆ **Fund 403 - Sewer Bond Debt Service** is used to record principal, interest and fiscal agent fees for the 1986/1993 and 1996 Sewer Revenue Bonds Series in accordance with the current Sewer Bond Resolution.
- ◆ **Fund 406 - Sewer Bond Debt Reserve** provides debt reserve funds for the 1986/1993 and 1996 Series of Sewer Revenue Bonds in accordance with the current Sewer Bond Resolution.

WASTEWATER MANAGEMENT PROGRAM FY 2004 OVERVIEW

- ◆ **Fund 407 - Sewer Bond Subordinate Obligations** was established in 1992 to record all debt service payments on the Upper Occoquan Sewage Authority (UOSA) 1991 Revenue Bonds and all subsequent UOSA and Alexandria Sanitation Authority revenue bonds. All future issues or refinancing of debt arising from interjurisdictional capacity rights may be treated as subordinate obligations of the System as provided by the General Bond Resolution for Sewer Revenue Bonds.
- ◆ **Fund 408 - Sewer Bond Construction** was established in 1987 for major program construction projects, which are funded from the issuance of sewer revenue bonds and/or program revenues.